

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Environmental Assessment**

**Water Protection Bureau**

**Name of Project:** Montana Artesian Water Company

**Type of Project:** Drinking Water  
Bottling Plant

**Location of Project:** 1085 Egan Slough Road

**City/Town:** Kalispell

**County:** Flathead

**Description of Project:**

Montana Artesian Water Company has applied for an Montana Pollutant Discharge Elimination System (MPDES) permit to discharge effluent from a drinking water bottling facility. Water would be drawn from an onsite, artesian, public water supply well, bottled, and sold as drinking water. For a more detailed description of the project please see the Fact Sheet prepared for the facility which includes a facility site map. The same water bottled for drinking would be used for two purposes that result in a discharge of effluent to be authorized by the proposed permit:

1. Non-contact heating water, which is an enclosed heating system. Water flow rate through the heating system is expected to be variable depending upon the heating needs of the facility at a given time with a maximum discharge rate of 60 gallons per minute (gpm). This water does not come into contact with any process or product and is discharged to an unnamed tributary to the Flathead River (receiving water) via a pipe (Outfall 001).
2. Drinking water bottle rinsate, which is the water used to rinse the drinking water bottles, as a cleaning step, prior to the bottles being filled with drinking water. This rinsate water would be discharged to the receiving water via a second pipe (Outfall 002). Discharge flow from the rinsing process through outfall 002 is expected to be a maximum of 5 gpm. The projected rinsate water quality is shown in Table 1 of the permit fact sheet.

**Agency Action and Applicable Regulations:**

The MPDES permit regulates point source discharge of pollutants to state surface waters. The permit includes monitoring requirements and effluent limits to protect the beneficial uses of state surface waters.

The agency action is to issue an MPDES permit to Montana Artesian Water Company for a five-year period.

ARM Title 17, Chapter 30, Sub-chapter 2 – Water Quality Permit Application and Annual Fees.  
ARM Title 17, Chapter 30, Sub-chapter 5 – Mixing Zones in Surface and Ground Water.  
ARM Title 17, Chapter 30, Sub-chapter 6 – Surface Water Quality Standards.  
ARM Title 17, Chapter 30, Sub-chapter 7 – Nondegradation of Water Quality.

ARM Title 17, Chapter 30, Sub-chapter 12 – MPDES Effluent Limitations and Standards,  
Standards of Performance, and Treatment Requirements  
ARM Title 17, Chapter 30, Sub-chapter 13 – MPDES Permits  
Montana Water Quality Act, MCA 75-5-101 et seq.

### Summary of Issues:

- Technology-based effluent limitations (TBELs) based on federal effluent limitation guidelines are applicable to the facility and have been included in the proposed permit for biochemical oxygen demand, total suspended solids, and pH. See Part I.B of the proposed permit.
- Water quality-based standards result in a more stringent limitation than the appropriate TBEL and have therefore been included in the proposed permit for oil and grease. See Part I.B of the proposed permit.
- The public has raised concerns regarding the volume, or quantity, of ground water approved for removal from the aquifer and the potential effect on neighboring wells. Public concerns regarding traffic, noise, and generation of dust have also been expressed regarding this project.

### Affected Environment & Impacts of the Proposed Action:

Y = Impacts may occur.

N = Not present or No significant impact expected.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	<p>[N] The discharge flow into the receiving water body is not expected to have significant adverse impacts on the geology, soil quality or stability.</p> <p>The construction of the outfalls will result in relatively small disturbance of short duration. No significant adverse impacts to geology, soil quality or stability are expected as a result of construction and installation of the outfalls.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	<p>[N] The MPDES permit includes effluent limits, monitoring requirements and other permit conditions that will ensure the water quality standards and beneficial uses are protected. The permitted outfalls will cause a slight increase in water quantity within the receiving water. This increase is less than the nonsignificance criteria in ARM 17.30.715(1)(a).</p> <p>The Department of Natural Resources and Conservation (DNRC) EA for Water Use Permit 76LJ30102978, completed January 7, 2016, evaluated a much larger groundwater withdrawal than is proposed in the MPDES permit. DNRC found no significant impact to groundwater quantity as a result of this appropriation. Because the withdrawal of water necessary for operation of the project consistent with the MPDES permit conditions is much smaller, the discharge permit is likewise expected not to significantly impact groundwater quantity.</p> <p>See also the discussion of cumulative effects (26) in this EA.</p>

## IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>3. AIR QUALITY: Will pollutants or particulates be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[N] Impacts on air quality resulting from issuance of the MPDES permit will be due to construction dust, which will be short-lived and associated with disturbance during the installation of the discharge lines and outfalls. These short-term impacts are not expected to be significant.</p> <p>An increase in local traffic resulting from operation of the facility is addressed in this EA under Cumulative Impacts (26). The project is not within a Class I airshed.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>[N] Seven plant species of special concern were identified by the Montana Natural Heritage Program to potentially be in the project area. This project is located in a developed residential and agricultural area and significant adverse impacts are not expected to any of the species of concern (see DNRC EA for Water Use Permit 76LJ30102978, completed January 7, 2016).</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] Effluent limits and permit conditions will ensure water quality standards for aquatic life are protected.</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] Eleven animal species and seven plant species of special concern were identified by the Montana Natural Heritage Program to potentially be in the project area. The discharges to the unnamed tributary are proposed to be located approximately 1,300 feet from the confluence of the receiving water with the Flathead River which is considered Bull Trout habitat (a threatened species) at this location. The unnamed tributary is not suitable Bull Trout habitat due to its low flow, narrow straight channel, silty substrate and short distance. The permit limits will protect aquatic life in the receiving water prior to its confluence with the Flathead River and will prevent significant adverse impacts to Bull Trout. This project is located in a developed residential and agricultural area and significant adverse impacts are not expected to any of the species of concern (see DNRC EA for Water Use Permit 76LJ30102978, completed January 7, 2016). During a site visit on April 11, 2016, DEQ did not identify any wetlands impacted.</p>
<p>7. SAGE GROUSE EXECUTIVE ORDER: Is the project proposed in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: <a href="http://dnrc.mt.gov/divisions/cadd/sage-grouse/">http://dnrc.mt.gov/divisions/cadd/sage-grouse/</a>? If yes, did the applicant attach documentation from the Program showing compliance with Executive Order 12-2015 and the Program's recommendations? If so, attach the documentation to the EA and address the Program's recommendations in the permit. If project is in core, general or connectivity habitat and the applicant did not document consultation with the Program, refer the applicant to the Sage Grouse Habitat Conservation Program.</p>	<p>[N] The Department has verified the facility is not within core, general, or connectivity sage grouse habitat.</p>
<p>8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] The building for the project is already constructed and the project is located entirely on private property. No known historical or archaeological sites are present.</p>

### IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>9. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>[N] The bottling facility building is constructed as verified on the April 11, 2016 site visit. The project is in an area comprised of developed residential and agricultural properties. The constructed building is not located on a prominent topographic feature and due to the surrounding developed land; this project is not expected to adversely impact a scenic area.</p> <p>Cumulative impacts: The main building planned to house the water bottling facility at a production level commensurate with the MPDES permit is already constructed onsite and is located entirely on private property. Operation of the facility will result in minimal noise from traffic and there is a night down light on each side of the building that can be turned off as needed to mitigate light impacts. The hours of operation are estimated at ten hours per day, six days per week or less. Any additional impacts on aesthetics associated with operation of the bottling facility are not expected to be significant.</p>
<p>10. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)</p>	<p>[N] The project will use groundwater as its source water. Water rights are regulated by the Montana Department of Natural Resources and Conservation (see DNRC EA for Water Use Permit 76LJ30102978, completed January 7, 2016).</p> <p>The area is not designated as a closed basin or groundwater control area. The water bottling building is currently served by an 800-foot extension of three phase power. No upgraded power lines or other energy source are needed.</p>
<p>11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?</p>	<p>[N] At present, there are no other nearby activities that would affect the project.</p>

### IMPACTS ON THE HUMAN ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>12. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[N] Effluent limits and permit conditions will ensure water quality standards are met and -human health is protected.</p> <p>Cumulative impacts: Operation of the water bottling facility commensurate with the conditions of the MPDES permit will result in no significant adverse impacts on human health and safety associated with the project. See the discussion of noise, dust, and light impacts in previous sections of the EA.</p> <p>Also see Cumulative Effects (26) of this EA.</p>

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	<p>[N] The permitted outfalls and discharge are not expected to significantly add to or alter industrial, commercial, and agricultural activities and production in the area.</p> <p>The construction and operation of the water bottling facility are not state actions and are not direct or secondary impacts of the state action.</p> <p>Cumulative impacts: Operation of the water bottling facility commensurate with the MPDES permit requirements will result in an additional industrial enterprise in the area. Because the water bottling facility building is already in existence and the site is already developed, no additional impacts to agricultural or other commercial activities are expected to occur.</p>
14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] The operation of the facility is expected to result in two to six permanent jobs and five to nine temporary jobs. Changes in employment are not direct or secondary impacts of the issuance of the MPDES permit.
15. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] Operation of a new business will create tax revenue. Negative impacts are not significant. In addition, fees to the state and local government are required to apply for and maintain an MPDES permit and other development permits. However, these fees are not significant.
16. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	<p>[N] Flathead County has already approved a road approach authorization for the project (AE-2937). Construction of the outfalls and the permitted discharge authorized by the MPDES permit is not expected to result in direct or secondary impacts on traffic, schools, or other government services.</p> <p>Cumulative impacts: Operation of the project at a production level commensurate with the MPDES permit is expected to use one to four trucks per day for transportation of products. Flathead County is responsible for dust control on area roads, so additional county government services may be required. DEQ contacted Flathead County and verified that a program is in place to address dust on county roads. The county will work collaboratively with MAWC to address dust. These impacts on government services are not expected to be significant.</p>
17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] Applicant must comply with all applicable federal, state, county, and other local requirements related to zoning, authorizations, permits, and approvals.
18. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] Not present.

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	<p>[N] The area is comprised of developed agricultural and residential property. There are no direct or secondary impacts to population and housing resulting from the issuance of the MPDES permit.</p> <p>Cumulative impacts: The operation of the water bottling facility at a production level commensurate with the MPDES permit is not expected to significantly impact the density and distribution of population and housing.</p>
20. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	<p>[N] The project is in an area comprised of developed agricultural and residential property. There are no direct or secondary impacts to social structures, mores, or lifestyles resulting from the issuance of the MPDES permit.</p> <p>Cumulative impacts: The building necessary for operation of the facility at a production level commensurate with the MPDES permit is on site. Construction, development, and operation of the facility will result in an increase in traffic due to additional jobs and transport of bottled water from the bottling facility. No significant adverse impacts on area property values and lifestyle are expected to occur.</p> <p>Also see Cumulative Effects (26).</p>
21. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	<p>[N] The project is in an area comprised of developed agricultural and residential property. Development must occur in compliance with the Flathead County Growth Policy. Construction and operation of outfalls 001 and 002 and discharges permitted under the MPDES permit are not expected to result in direct or secondary impacts to unique cultural qualities of the area.</p> <p>The construction and operation of the water bottling facility are not state actions and is not a direct or secondary impact of this state action.</p> <p>Cumulative impacts: The operation of the water bottling facility at a production level commensurate with the MPDES permit requirements will not result in significant impacts to unique cultural qualities of the area.</p> <p>Also see Cumulative Effects (26).</p>
22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]
23(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N]

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
23(b). PRIVATE PROPERTY IMPACTS: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.	[N]
23(c). PRIVATE PROPERTY IMPACTS: If the answer to 23(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.	[N]

24. Description of and Impacts of other Alternatives Considered:

No action alternative: Deny issuance of the permit. Permit denial would require the applicant to find other alternatives for effluent disposal. Given the low volume of the discharge, MAWC could find alternatives that are not subject to the rigorous environmental review done here.

25. Summary of Magnitude and Significance of Potential Impacts:

The discharges from Outfall 001 and Outfall 002 are regulated by the conditions of the proposed permit. The permit conditions ensure that all beneficial uses of the receiving water are protected and the discharges will not cause significant changes in existing water quality. The Department has determined no significant adverse impacts to the physical or human environment associated with the permitted discharge of effluent or construction of the outfalls as described in the MPDES permit application will occur.

As noted throughout the EA, there are impacts that may occur because of the operation of the water bottling facility. These impacts are not direct or secondary impacts resulting from the issuance of the MPDES permit. See section 26 of the EA for cumulative effects analysis and refer to sections 1 – 23 above for additional discussion of cumulative effects.

26. Cumulative Effects:

Under § 75-1-208(11), an agency shall, when appropriate, evaluate the cumulative impacts of a proposed project. However, related future actions may only be considered when these actions are under concurrent consideration by any agency through preimpact statement studies, separate impact statement evaluations, or permit processing procedures.

There are no other permitted discharges to the unnamed tributary to the Flathead River and the permit conditions ensure there will be no significant changes to existing water quality associated with issuance of the MPDES Permit. The nearest permitted discharges to the Flathead River are located several miles upstream of the Montana Artesian site. There are no known cumulative effects from these discharges.

Cumulative effects resulting from other State actions at this site are generally related to water appropriation for the project's water supply well and potential effects on water availability in other nearby water supply wells. These concerns are addressed in the ongoing analysis conducted by DNRC. See also the EA for Water Use Permit 76LJ30102978, completed January 7, 2016.

Cumulative effects, as defined under MEPA, related to the issuance of the DNRC water right are limited to those commensurate with the operation of the facility as proposed in the MPDES permit application. When applying for a water right through DNRC, applicants first apply for the maximum expected volume of water needed. Should MAWC be granted the full water right under consideration by DNRC, they enter a perfection period which is a reasonable timeframe to determine the actual volume of water that will be used. At the end of this perfection period, MAWC must submit a notice of completion and demonstrate actual water use during the last year of the perfection period. The water right is then capped at this volume of water unless an extension is applied for and granted by DNRC. The final water right cannot exceed the maximum expected volume applied for initially. Cumulative impacts with this action, the issuance of the MPDES permit, are limited to the smaller volume of water use described in the MPDES permit application because before MAWC may increase their wastewater discharge volume, they must first apply for and obtain a major modification of the MPDES permit. Major modifications to MPDES permits undergo a new MEPA review and public participation process. Even if MAWC does receive the full water right, the volume of wastewater that may be discharged is limited by the MPDES permit until another MEPA review including public process occurs. The impacts of the DNRC water right, beyond the volume of water commensurate with the MPDES permit application, are related to water appropriation, are not direct or secondary impacts of the MPDES permit, and are analyzed by DNRC when granting the water right.

The public water supply well (source water well for the project) was reviewed by DEQ and no significant impacts were found, EQ#15-1097, EA completed August 13, 2014.

The process for treating the water prior to bottling was reviewed by DEQ and no significant adverse impacts were found, EQ#16-1158, EA completed November 29, 2016.

Operation of the facility at a production level commensurate with the MPDES permit limitation will result in 1 to 4 trucks per day and employee vehicles on area roads. Cumulative effects related to this increased traffic and generation of nuisance dust on area roads is not a significant adverse change from the current agricultural and residential uses in the area. Even if the no action alternative were selected and this discharge permit

denied, these effects could still occur if the applicant elected to continue the operation of the facility and dispose of wastewater via a method that did not require a discharge to state waters.

27. Preferred Action Alternative and Rationale:

The preferred action is to issue the MPDES permit. This action is preferred because the permit program provides the regulatory mechanism for protecting water quality by enforcing the terms of the MPDES permit.

**Recommendation for Further Environmental Analysis:**

☐ EIS    ☐ More Detailed EA    ☒ No Further Analysis

Rationale for Recommendation: An EIS is not required under the Montana Environmental Policy Act (MEPA) because the project lacks significant adverse effects to the human and physical environment based on the following criteria in ARM 17.4.608(1)(a) through (g):

- (a) the severity, duration, geographic extent, and frequency of occurrence of the impact;
- (b) the probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
- (c) growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
- (d) the quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;
- (e) the importance to the state and to society of each environmental resource or value that would be affected;
- (f) any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
- (g) potential conflict with local, state, or federal laws, requirements, or formal plans.

As described above, DEQ's decision to issue MPDES Permit No. MT0031861 authorizes discharges to a tributary of the Flathead River subject to permit conditions and limitations that will protect beneficial uses and prevent significant changes in water quality. The impacts from construction of outfalls 001 and 002 may result in dust, but are expected to be of short duration and mitigated by the Flathead County dust control program. Environmental impacts resulting from issuance of the MPDES permit are localized and will be managed through permit conditions and limitations. The water bottling plant associated with the permit is located in a developed residential and agricultural area and significant adverse impacts to unique or fragile resources as a result operation of the plant is not expected. Future modification of the MPDES permit, further environmental analysis, and public comment will be necessary to significantly increase the volume of

water discharged from the bottling plant. At the time of this analysis, there are no known conflicts with local, state, or federal laws, requirements, or plans.

28. Public Involvement:

A 40-day public comment period was held. In addition to the public comment period, a public hearing was held on August 1, 2016 at the Creston School. DEQ accepted oral comments at the public hearing and responded in writing to all substantive comments.

29. Persons and agencies consulted in the preparation of this analysis:

DNRC EA for Water Use Permit 76LJ30102978, completed January 7, 2016, by Nathaniel T. Ward

DEQ EQ#15-1097, EA completed August 13, 2014, by Emily J. Gillespie, P.E.

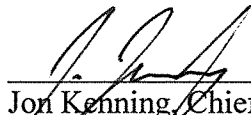
DEQ EQ#16-1158, EA completed November 29, 2016, by c Denver Fraiser.

Brad Bennett, Applied Water Consulting LLC

**EA Prepared By:**

DEQ Water Protection Bureau, August 31, 2017

**Approved By:**

  
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Jon Kenning, Chief  
Water Protection Bureau

September 5, 2017  
Date

